

REMARKS

The Office Action of November 28, 2007, has been carefully reviewed, and in view of the above amendments and the following remarks, reconsideration and allowance of the pending claims are respectfully requested.

In the above Office Action, claims 21, 37, 51, 53, 55, 57 and 59 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Kirita* (U.S. Patent No. 6,659,672) in view of *Takanashi et al* (U.S. Patent No. 6,428,235) and *Madaus et al.* (U.S. Patent No. 4,979,840). For at least the reasons set forth below, Applicant respectfully traverses these rejections.

In response to Applicant's earlier arguments, the Examiner points out that there are visually observable differences between the wet part and the dried part of a tinted foamed material, as conventionally seen in ink jet printer cartridges. The Examiner takes the position that such a cartridge shows an indication of the level of ink depletion. In the case of an ink jet printer cartridge, the Applicant presumes that the foamed material does not have capillary force for the ink since the differences between the wet part (i.e. involving liquid) and the dried part (i.e. involving air and no liquid) can be observed, as noted by the Examiner. In this situation, the foamed material absorbs less ink to thereby form the interface between the liquid part (wet part) and the dried part (involving no liquid), and the ink stays at a bottom part of the ink reservoir.

In contrast to such foamed material cartridges, the writing instrument in the present invention is of a sliver type. The sliver has capillary force for the stored ink. When the ink is impregnated in the sliver, it is impossible to observe the interface between the wet part and the dried part because the sliver is totally tinted with the

color of the impregnated ink. Once the sliver is tinted with the ink, it is impossible to visibly detect from the outside whether the ink is still filled or if it is completely depleted. Thus, even if the sliver is observed through a transparent member, the interface of the wet part and the dried part can not be visibly detected in a writing instrument of sliver type.

On the other hand, the guiding feed of the present invention is a transparent hollow tube. Thus, when the ink occluded in the sliver is depleted, the ink remaining in the guiding feed moves to the pen tip and is replaced with air. Therefore, the color of the guiding feed changes from the ink color to transparency (air) in a moment so that depletion of the ink can be easily detected. Claim 59 has been amended to better clarify this distinction.

The writing instrument of Claim 21 defines a structure in which ink is filled into the pen tip without the use of air by disposing a hollow tubular guiding feed (which has little or no capillary force) between two members that have capillary force, i.e., the ink occlusion body and the pen tip. Applicant submits that such a structure would not be obvious based upon conventional writing instruments which use capillary force in successively disposed members, from an ink storing part to a pen tip, through all of which there is capillary force.

The primary reference upon which the Examiner relies, Kirita, discloses a pen element configured of a support member 11 and an ink leader portion 12 (column 5, lines 26 to 28). The support member is made up of transparent material and composed of a viewer portion 11a and a shank portion 11b to provide a clear view in the writing direction through the portion (column 5, lines 31 to 41). The support member does not serve as an ink lead portion, but supports the ink leader portion

and a writing part. The ink leader portion 12, the ink leader shank part 12a and the writing part 13 are formed of a porous material (column 5, lines 45 to 50) which apparently has capillary force for the ink so that a wet part and a dried part can not be visually observed. Therefore, it does lead to detection of a depletion of the ink.

Thus, the writing implement in Kirita is provided with an ink absorbing element (101), an ink leader portion 12, and a writing part 13 all of which have capillary force, whereas the writing instrument of the present invention has a hollow tube filled with ink disposed between two members having capillary force, as recited in claim 21.

The Examiner further alleges that Takanashi discloses an analogous writing instrument which includes a barrel (12) and an ink guiding feed (18) made out of transparent material. However, Takanashi does not define the member 18 as an ink guiding feed. Rather, it is a collector. A collector is a member which temporarily retains ink when the ink stored in an ink tank spouts with increased pressure due to temperature rise. The leaked ink returns to the ink tank when the pressure in the ink tank is decreased due to consumption of the ink or temperature drop. The ink flow proceeds in the following order: the ink tank 16 - an intermediary core 24 - a pen core 10. Therefore, what is being observed in the collector is the leaked ink, not the consumption of the ink. Applicant submits that the modification of the primary reference proposed by the Examiner would not suggest the claimed invention to one skilled in the art.

Further, when the collector of Takanashi is made of a transparent material, the intermediary core 24 can be seen. However, since the intermediary core is made up of a compressed fabric (column 7, lines 59 to 62) which has capillary force

for the ink, an outside observer still will not be able to detect the interface between the wet part and the dried part.

Madaus also does not suggest the structure of the present invention and does not provide the teaching found to be lacking in the first and secondary references.

CONCLUSION

In view of the above amendments and remarks, Applicants respectfully submit that the claims of the present application are now in condition for allowance, and an early indication of the same is earnestly solicited.


The undersigned counsel for Applicant has been provided with samples of writing instruments manufactured in accordance with *Kirita* (U.S. Patent No. 6,659,672) and *Takanashi et al* (U.S. Patent No. 6,428,235). Should the Examiner believe that a personal interview and demonstration of these devices would be helpful in resolving any remaining issues pertaining to this application; the Examiner is kindly invited to call the undersigned counsel for Applicants regarding the same.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: February 28, 2008

By:



Wendi L. Weinstein
Registration No. 34456

P.O. Box 1404
Alexandria, VA 22313-1404
703 836 6620